

REMARKS

Claims 13-20 and 27-54 will be pending upon entry of the present amendment. Claims 13, 16, 18, 38, and 41-45 have been amended. New claims 46-54 are herewith submitted.

Claims 13, 16, 18, 38, and 41-45 have been amended to change the term “spacing region” to “spacing body.” This amendment is made solely to make more clear the structure of the recited feature, and is not made to distinguish the claims over prior art, or for other reasons of patentability, nor does the amendment change the scope of the claims. The specification has been amended to provide clear support for the change of terminology, as provided for in MPEP §608.01(o). Claim 38 has also been amended to clarify antecedence, and claim 44 has been amended to correct a typographical error.

The specification has also been amended to correct an inadvertent error in reference.

The Examiner has rejected claims 13-18, 27-30, and 43-45 under 35 U.S.C. § 102(b) as being anticipated by Chao et al. (5,633,535, hereafter “Chao”). The Examiner has also rejected claims 19, 20, 31 and 41 under 35 U.S.C. § 103 over Chao in view of Yew et al. (U.S. 6,137,164, hereafter “Yew”). Claims 32-40 have been rejected under 35 U.S.C. § 103 over Chao and Yew in view of Duboz et al. (U.S. 5,726,500, hereafter “Duboz”).

Claim 13 recites, in part, “a spacing body arranged near said electrically conductive region and surrounding an active region.” Applicant remains of the opinion that Chao fails to teach at least this limitation of claim 13. In rejecting claim 13, the Examiner cites Chao’s pedestals 40 as being analogous to the spacing body (previously “spacing region”) of claim 13. However, claim 13 recites a single spacing body surrounding an active region, while the Examiner tacitly acknowledges that a plurality of Chao’s pedestals are required to surround an active region. For example, note the Examiner’s parenthetical comment on page 4, third paragraph, of the recent office action, in which the Examiner states “metal regions and connection structure 43 are formed within space defined by *spacers* 40” (emphasis added). In contrast, the active region of claim 13 is surrounded by *a* spacing region.

Chao teaches the use of pedestals to control the height, or distance, between two substrates (see column 4, lines 30-34). In such an application, there is no need or motivation to surround any feature with a single pedestal, and Chao uses the term only in the plural form.

Chao's figures offer no suggestion that the pedestals shown are anything other than what they are described as: a plurality of individual pedestals positioned between two substrates at convenient positions. Chao states "The placement of the pedestals can be just about anywhere that solder joints do not reside" (column 5, line 52 to column 6, line 2). Applicant does not believe that any single one of Chao's pedestals can be interpreted as surrounding an active region, and thus, Chao fails to teach all the limitations of claim 13. Claims 14-20, 40, and 41 are also allowable over Chao, as depending from an allowable base claim.

Claim 18 recites, "wherein said spacing body forms a delimiting cavity surrounding said electrically conductive region." In the Office Action of April 21, 2004, the Examiner points to the applicant's definition of the term "surrounding" (see the amendment of January 29, 2004, page 6, 5th paragraph). The same paragraph provides a definition of various other terms, including "delimiting cavity," as referring to a region that is completely enclosed by the spacing region. Clearly, Chao does not teach a delimiting cavity as recited in claim 18. Accordingly, claim 18 is allowable on its own merits, apart from its allowability as depending from an allowable base claim.

Claims 27 recites, "the spacer defining an enclosed space between the first and second bodies." The term "enclosed space" is also defined in the above-referenced paragraph as referring to a region that is completely enclosed. Chao fails to teach an enclosed space defined by a spacer, but rather, as stated by the Examiner, the "metal regions and connection structure 43 are formed within space defined by *spacers* 40." Applicant again notes that Chao requires a plurality of pedestals to define a space, and that there is no teaching that the space so defined is enclosed, as recited in claim 27. Accordingly, claim 27, together with dependent claims 28-33 is also allowable over Chao.

Claim 30 recites "wherein a micromechanical structure is formed within the enclosed space defined by the spacer." Chao fails to teach the limitation of claim 30. The term "micromechanical structure" is well known in the art as referring to a structure having a moveable component. For example, micromechanical structures known in the art include accelerometers, gyroscopes, pumps, motors, and resonant beams. In rejecting claim 30 the Examiner points to Chao's printed circuit board as being analogous to the micromechanical structure of claim 30. Applicant respectfully traverses this position. One having ordinary skill in the art would not find

any structure taught by Chao to be analogous to a micromechanical structure. Accordingly, Claim 30 is allowable on its own merits.

Applicant traverses the rejections of claims 43-45. Claim 43 recites, in part, “a spacing body...surrounding more than half of an active region.” No single pedestal of Chao is shown or described as surrounding more than half of an active region. Only in plural can Chao’s pedestals even be suggested as surrounding any portion of an active region. Claim 43 recites *a spacing body*, in the singular form. Unless Chao can be shown to teach a single pedestal as surrounding more than half of an active region, it cannot be considered to anticipate the limitation of claim 43.

Claim 44 recites, in part, “a spacing body...surrounding at least three sides of an active region.” Claim 45 recites, in part, “a spacing body...surrounding at least two contiguous sides of an active region.” While claims 44 and 45 differ in scope from each other and from claim 43, applicant believes that their allowability will be apparent in view of the argument presented in support of claim 43.

While no claims are indicated as being allowed or allowable on the cover of the recent Office Action, the Examiner has not rejected claim 42 in the body of the Office Action. Applicant presumes that this is an oversight, but also believes that claim 42 is allowable for reasons similar to those stated in support of the allowability of claim 43.

In rejecting claims 19, 20, 31, and 41, the Examiner relies on Chao for a teaching or suggestion of all the limitations of the respective base claims 13 and 27. Claims 13 and 27 have been shown to be allowable over Chao. Inasmuch as Yew cannot resolve the deficiencies of Chao, with respect to the base claims, dependent claims 19, 20, 31, and 41 are allowable with their respective base claims.

Claim 41 recites “the spacing region completely surrounds the active region.” Neither Chao nor Yew teach or suggest the limitation of claim 41. Yew is completely silent with respect to spacing regions or pedestals, while Chao teaches pedestals only in the plural. Claim 41 recites the spacing body in the singular form. Clearly, claim 41 is allowable on its own merits over the cited art.

In rejecting claims 32-40, the Examiner again relies on Chao for a teaching or suggestion of all the limitations of the respective base claims 27 and 13. Inasmuch as Yew and

Duboz, in the case of claims 32 and 33, and Duboz, alone, in the case of claims 34-40, cannot resolve the deficiencies of Chao, with respect to the base claims 27 and 13, claims 32-40 are allowable with their respective base claims.

In rejecting claims 32, 33, 37, and 39, the Examiner maintains that the limitations of these claims are taught or suggested by Duboz. Applicant has carefully reviewed Duboz for any mention of a mirror or mirrors, as recited in claims 32, 37, and 39, or for any mention of a diffractive lens, as recited in claim 33. None of the words "mirror," "lens," or "diffract," nor any variants of these words, are found in the Duboz reference. Additionally, words that might suggest these features, such as "reflect," "focus," or "refract" are also not found.

For example, in each of the previous Office Actions the Examiner has cited Duboz, column 4, lines 29-32 as teaching a mirror. Applicant can find no suggestion of a mirror in the passage. The cited passage is reproduced herebelow:

The silicon chips include electronic circuits and, especially in the case of infrared detectors, read and multiplexing circuits enabling signals representing the illuminations individually received by each of the photosensitive elements 31 to be read individually and transmitted sequentially to the outputs of the hybrid component.

The Examiner has also cited Figure 5 as showing a mirror. Applicant requests that the Examiner indicate the mirror, either by reference numeral or by feature.

Furthermore, it would be inadequate to simply demonstrate the presence of a mirror or lens, since the claims in question recite specific structure associated with the respective feature. If it is the Examiner's position that the photoelectric components of Duboz would inherently include these features in the structural relationship recited in the respective claims, or that such features and structures are common knowledge in the art, applicant respectfully traverses, and requests that the Examiner provide explicit documentary evidence of this, as provided for in MPEP §2144.03, paragraph C., which states:

If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained.

Applicant believes that claims 32, 33, 37, and 39 are allowable on their respective merits, apart from their allowability as depending from allowable base claims.

In the recent Office Action, the Examiner states "Applicants definition from specification cannot be imported into claims when the same are not recited in the claims." Applicant calls the Examiner's attention to MPEP §608.01(g), which states:

The description is a dictionary for the claims and should provide clear support or antecedent basis for all terms used in the claims.

Accordingly, it is wholly appropriate to cite the specification to clarify the meanings of terms used in the claims.

New claims 46-54 are submitted to provide additional scope to the claims, and are fully supported in the specification.

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited. In the event the Examiner finds minor informalities that can be resolved by telephone conference, the Examiner is urged to contact applicants' undersigned representative at (206) 694-4848 in order to expeditiously resolve prosecution of this application.

The Commissioner is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

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